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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
RADTKE, MARK A	

ART UNIT	PAPER NUMBER
2165	

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/647,503	KOBAYASHI, HIROKI	
	Examiner	Art Unit	
	Mark A. Radtke	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. In response to communications filed on 8 June 2006, claim(s) 23-26 is/are cancelled and claim(s) 1-18, 21 and 22 is/are amended per Applicant's request. Therefore, claims 1-22 are presently pending in the application, of which, claim(s) 1, 14 and 21 is/are presented in independent form.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 9-10 and 14-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Austin et al. (U.S. Patent 6,549,906).

As to claim 1, Austin et al. teaches an information processing apparatus (See Abstract. Any kind of electronic data can be retrieved and processed by this system, including images.), comprising:

a reception control part receiving a request for a Web page (see column 5, line 41, where "Web page" is read on "HTML") from a terminal connected to the information processing apparatus via a network (see figure 1 and see column 12, lines 36-41 and see column 10, lines 53-56);

first storage means for storing a plurality of compressed document form information files (see figure 2, Input DB 202 and see column 7, lines 29-31 and see column 7, lines 39-42, where "compressed document form information files" is read on "customer data sets");

a decompression part decompressing at least one of the plurality of compressed document form information files in the first storage means into at least one document form data item (see column 8, lines 18-23 where "decompressed" is read on "expanded" and "document form data item" is read on "usable expanded vendor-formatted data sets");

second storage means for temporarily storing the at least one document form data item, said storage means comprising a volatile memory (see column 19, lines 1-13 and see column 5, lines 11-13);

a Web page creation part using a document form data item in the second storage means to create the Web page (see column 9 lines 42-45 and column 5, line 41); and

a transmission control part sending the created Web page to the terminal (see figure 1 and see column 10, lines 53-56).

As to claims 2 and 22, Austin et al. teaches wherein the plurality of document form information files are XSL files (see column 9, lines 42-43).

As to claims 3 and 15, Austin et al. teaches wherein the decompression part decompresses at least one of the plurality of compressed document form information files after the information processing apparatus is actuated and before the reception control part receives a first request for the Web page from the terminal (See column 12, lines 36-42, where "before the reception control part receives a first request" is read on "at specific times." Immediately after retrieval of customer data sets, the decompression begins in the expansion module. See also column 8, lines 23-25, where "before the reception control part receives a first request" is read on "simultaneously").

As to claims 4, 6, 16 and 18, Austin et al. teaches wherein the decompression part decompresses all files to be potentially used among the plurality of compressed document form information files after the information processing apparatus is actuated and when the reception control part receives a first request for the Web page from the terminal (see column 12, lines 36-42 where "when the reception control part receives a first request" is read on "upon request").

As to claims 5 and 17, Austin et al. teaches wherein the decompression part decompresses all of the plurality of compressed document form information files in the

first storage means (See column 8, lines 23-25. It is implicit that if the operations are done simultaneously then all of the documents would be decompressed).

As to claims 9 and 19, Austin et al. teaches wherein the Web page creation part deletes the document form data item from the second storage means after creation of the Web page (see column 12, line 65 – column 13, line 2).

As to claims 10 and 20, Austin et al. teaches wherein the Web page creation part comprises a decompression determination part determining whether or not the document form data item is stored in the second storage means, and the Web page creation part uses the document form data item to create the Web page based on determination of the decompression determination part (see column 8, lines 56-62).

As to claim 14, Austin et al. teaches a method of creating a Web page for an information processing apparatus that receives a request for the Web page from a terminal connected to the information processing apparatus via a network and sends the created Web page to the terminal (see Examiner's comments regarding claim 1), the method comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 1 above.

As to claim 21, Austin et al. teaches an information processing system (see Examiner's comments regarding claim 1), comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 1 above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin et al. in view of Arcuri et al. (U.S. Patent 6,915,299).

As to claim 7, Austin et al. teaches wherein the decompression part, after the information processing apparatus is actuated and before or when the reception control part receives a first request for the Web page from the terminal, decompresses (see Examiner's response to claim 3).

Austin et al. does not teach wherein the decompression part decompresses a predetermined number of the plurality of compressed document form information files in most recently accessed order.

Arcuri et al. teaches wherein the part carries out an action on a predetermined number of the plurality of files (see column 9, lines 29-37, where "predetermined number of the plurality of files" is read on "two or more different document libraries") in most recently accessed order (see column 9, lines 48-51).

Therefore, it would have been obvious to one of ordinary skill in the relevant art at the time the invention was made to have combined the decompression part of Austin et al. with the most recently accessed method of Arcuri et al. because it is a well-known algorithm for accessing data from a cache.

As to claim 8, Austin et al. teaches wherein the decompression part, after the information processing apparatus is actuated and before or when the communication control part receives a first request for the Web page from the terminal, decompresses

Austin et al. does not teach wherein the decompression part decompresses a predetermined number of the plurality of document form information files in most frequently accessed order.

Arcuri et al. teaches wherein the decompression part decompresses a predetermined number of the plurality of document form information files (see column 9, lines 29-37, where "predetermined number of the plurality of files" is read on "two or more different document libraries") in most frequently accessed order (see column 9, lines 48-51).

Therefore, it would have been obvious to one of ordinary skill in the relevant art at the time the invention was made to have combined the decompression part of Austin

et al. with the most frequently accessed method of Arcuri et al. because it is a well-known algorithm for accessing data from a cache.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Austin et al. in view of Chung (U.S. Patent Application Publication 2003/0084152).

As to claim 11, Austin et al. teaches wherein the Web page creation part (see Examiner's comments regarding claim 1).

Austin et al. does not teach wherein, when the number of the document form data items exceeds a predetermined value, deletes one of the at least one document form data item in the second storage means from said second storage means.

Chung teaches wherein, when the number of the document form data items exceeds a predetermined value, deletes one of the at least one document form data item in the second storage means from said second storage means (see figure 4 and page 6, paragraph [0065]).

Therefore, it would have been obvious to one of ordinary skill in the relevant art at the time the invention was made to have combined the decompression part of Austin et al. with the caching algorithm of Chung because it could speed up database applications with "records that are relatively static but may require periodic updates" (see Chung, page 6, paragraph [0064]).

7. Claim 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin et al. in view of Chung, as modified, further in view of Porter et al. (U.S. Patent Application Publication 2004/0030682).

As to claim 12, Austin et al., as modified, teaches the Web page creation part (see Examiner's comments regarding claim 1).

Austin et al., as modified, still does not teach wherein the Web page creation part deletes the least recently used document form data item in the second storage means from said second storage means.

Porter et al. teaches wherein deletes the least recently used document form data item in the second storage means from said second storage means (see page 4, paragraph [0029]).

Therefore, it would have been obvious to one of ordinary skill in the relevant art at the time the invention was made to have modified the web page creator of Austin et al., as modified, with the LRU algorithm of Porter et al. because "the amount of memory (size) contained in the query cache 18 remains approximately constant" (see Porter et al., page 4, paragraph [0029]).

As to claim 13, Austin et al., as modified, teaches the Web page creation part (see Examiner's comments regarding claim 1).

Austin et al., as modified, still does not teach wherein the Web page creation part deletes the earliest stored document form data item in the second storage means from said second storage means.

Porter et al. teaches wherein deletes the earliest stored document form data item in the second storage means from said second storage means (see page 4, paragraph [0029], where "earliest stored" is read on "oldest").

Therefore, it would have been obvious to one of ordinary skill in the relevant art at the time the invention was made to have modified the web page creator of Austin et al., as modified, with the LRU algorithm of Porter et al. because "the amount of memory (size) contained in the query cache 18 remains approximately constant" (see Porter et al., page 4, paragraph [0029]).

Response to Arguments

8. Applicant's arguments filed on 8 June 2006 with respect to the rejected claims in view of the cited references have been fully considered but are not deemed persuasive.

In response to Applicant's remarks regarding claim objections under 37 C.F.R. 1.75, the objections have been withdrawn in light of Applicant's amendments. Claims 4 and 6 are rejected under the same grounds as the previous Office Action because in the case of XSL files, all files that may be used are required (using the <xsl:include> element). The claims differ in scope, but are both still disclosed by Austin et al.

In response to Applicant's arguments that Austin et al. does not teach decompressing compressed data in the information processing apparatus and transferring the decompressed data to a requesting format, the arguments have been fully considered but are not deemed persuasive. Applicant's argument that "Austin discloses methods of compressing a Web page database to minimize "retrieval time" and expanding data received via a network by means of an "Expansion Module"" is directed towards additional portions of the reference than those cited by the Examiner. Column 7, lines 29-31 is not relevant to the Examiner's interpretation of the limitation. In the relevant portions of Austin et al. (column 8, lines18-23), a "translated data set" is operated on by the "expansion module" to create a larger "usable expanded vendor-formatted data set". Expansion and decompression are equivalent operations. No definition for "compression" is stated or implied by the specification of the instant application. The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition, defines "data compression" as "Any technique used to reduce the amount of storage required to store data". In light of this definition, a reasonable definition of "data decompression" would be "Any technique used to increase the amount of storage required to store data". If the translated data set is "expanded" then it must require an increased amount of storage ("To increase the size, volume, quantity, or scope of; enlarge", definition of "expand", The American Heritage College Dictionary, Fourth Edition). Therefore, the "decompression" of the instant application is equivalent to the "expansion" of Austin et al., as asserted in the previous Office Action.

In response to Applicant's arguments that Austin et al. does not teach being "stored in the volatile memory", the arguments have been fully considered but are not deemed persuasive. Austin et al. does not explicitly state in which type of memory (volatile or non-volatile) the second storage means is saved in. However, Austin et al. discloses volatile memory (see column 5, lines 11-13, RAM) and it is well-known in the art that frequently accessed databases are stored in volatile memory for faster access (See "Oracle architectural design tips" by Donald Burleson, available online at http://builder.com.com/5100-6388-1045656.html, "Use RAM data caching". Published 5 April 2002). Furthermore, data that is received for decompression, immediately decompressed and thereafter immediately sent to a client will remain in RAM as long as it is being operated on (in other words, it will not be moved into virtual memory). Therefore, Austin et al. anticipates storing the document in volatile memory.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications should be directed to the examiner, Mark A. Radtke. The examiner's telephone number is (571) 272-7163, and the examiner can normally be reached between 9 AM and 5 PM, Monday through Friday.

If attempts to contact the examiner are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached at (571) 272-4146.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (800) 786-9199.

maxr
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21 August 2006

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
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